

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraphs on page 4, lines 6-18, with the following rewritten paragraphs:

Fig. 1A-D is a set of drawings showing a centrifugal separator according to one embodiment of the invention prior to the addition of a multiphase mixture. Fig. 1B is a sectional view taken along line 1B-1B in Fig. 1A. Fig. 1C is a sectional view taken along line 1C-1C in Fig. 1A.

Fig. 2A-D is a set of drawings showing a centrifugal separator as shown in ~~figure~~ Fig. 1 after separation of the multiphase mixture and removing a portion of the separated mixture from the separator to waste. Fig. 2C is a sectional view taken along line 2C-2C in Fig. 2A.

Fig. 3A-D is a set of drawings showing a centrifugal separator as shown in ~~figure~~ Fig. 1 after separation of the multiphase mixture and removing a portion of the separated mixture from the separator for further processing. Fig. 3C is a sectional view taken along line 3C-3C in Fig. 3A.

Fig. 4A-D is a set of drawings showing a centrifugal separator as shown in ~~figure~~ Fig. 1 after removal of all components of the separated mixture from the separator and delivering a cleaning solution to the separator. Fig. 4B is a sectional view taken along line 4B-4B in Fig. 4A. Fig. 4C is a sectional view taken along line 4C-4C in Fig. 4A.

Fig. 5A-D is a set of drawings showing a centrifugal separator as shown in ~~figure~~ Fig. 1 removing the cleaning solution from the separator to waste. Fig. 5C is a sectional view taken along line 5C-5C in Fig. 5A.

Please replace the paragraph on page 10, lines 21-31, with the following rewritten paragraph:

In yet another embodiment, the flow centrifuge also acts as a mixer in which the bowl can be modified to have small mixer/agitator vanes or baffles at the base of the bowl to provide for

complete low speed alternate rotation for mixing of the introduced multiphase mixture, prior to centrifugal partition of the aqueous phases. For example, during automated, continuous operation of the centrifugal separator, the buffer solutions and buffers containing plant material disrupted to release the nuclei from cells, phase buffers or other appropriate solutions or additives may be added to the bowl and the phase buffer and other ingredients gently mixed together by the impeller action of the mixing vanes or agitator at low speed. An increase in the speed of rotation in the bowl mode causes the solutions and materials to migrate along the walls of the bowl under the influence of the applied centrifugal field until the solutions accumulate at the radial extremity of the bowl.